



Box Seq
PCT/PTO
IC20 Rec'd PCT/PTO 19 APR 2002
PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Atty. Dkt.: Q63988

Izumu SAITO, et al.

Appln. No. 09/807,223

Group Art Unit: Unknown

Confirmation No.: Unknown

Examiner: Unknown

Filed: April 11, 2001

For: RECOMBINASE-EXPRESSING CELLS

RESPONSE TO NOTIFICATION OF DEFECTIVE RESPONSE

Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the "Notification of Defective Response", mailed March 22, 2002, submitted herewith is a Statement to Support Filing and Submission in Accordance with 37 C.F.R. § 1.821-1.825 with a paper copy of the sequence listing (2 pages) and an ASCII diskette which contains a computer readable copy of the sequence listing. Also attached is a copy of the Notification of Defective Response.

If there are any fees associated with this filing, you are directed and authorized to charge Deposit Account No. 19-4880. The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16, 1.17 and 1.492 which may be required during the entire pendency of the

Izumu Saito
Appln. No. 09/807,223

application to Deposit Account No. 19-4880. A duplicate copy of this transmittal letter is attached.

Respectfully submitted,



J. Frank Osha
Registration No. 24,625

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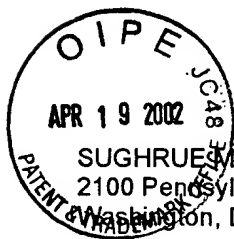
Date: April 19, 2002



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT
 United States Patent and Trademark Office
 Washington, D.C. 20231
 www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/807,223	Isumu Saito	Q63988



SUGHRUE MION ZINN MACPEAK & SEAS
 2100 Pennsylvania Avenue NW
 Washington, DC 20037-3213

INTERNATIONAL APPLICATION NO.	
PCT/JP99/05548	
I.A. FILING DATE	PRIORITY DATE
10/07/1999	10/12/1998

DOCKETED

MAR 27 2002

CONFIRMATION NO. 5950
 371 FORMALITIES LETTER



OC000000007698197

Date Mailed: 03/22/2002

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fee
- Priority Document
- Assignee Statement
- Biochemical Sequence Diskette
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Information Disclosure Statements
- Oath or Declaration
- Preliminary Amendments

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the

computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."

- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- **APPLICANT MUST PROVIDE:**
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.

- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

- A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

VONDA M WALLACE

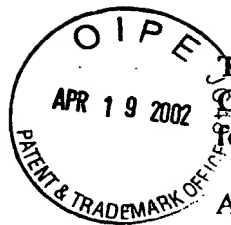
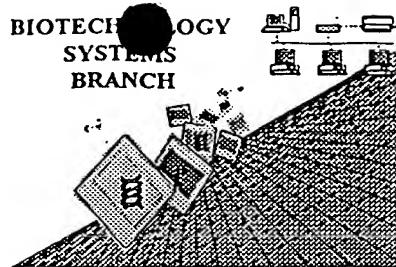
Telephone: (703) 305-3736

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/807,223	PCT/JP99/05548	Q63988

RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/807,223

Source: PT/09

Date Processed by STIC: 4/24/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer-Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

MAIL THIS COPY

Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/807,223

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 ☐ Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 ☐ Wrapped Aminos The amino acid number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 ☐ Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 ☐ Misaligned Amino Acid Numbering The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 ☐ Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 ☐ Variable Length Sequence(s) ☐ contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.
- 7 ☐ PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) ☐. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 8 ☐ Skipped Sequences (OLD RULES) Sequence(s) ☐ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS: (Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 ☐ Skipped Sequences (NEW RULES) Sequence(s) ☐ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 10 ☐ Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 ☐ Use of "Artificial" (NEW RULES) Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules.
Valid response is Artificial Sequence.
- 12 ☐ Use of <220> Feature (NEW RULES) Sequence(s) ☐ are missing the <220> Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown".
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 ☐ PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/807,223

DATE: 04/24/2001

TIME: 13:26:16

Input Set : A:\Q63988 Sequence Listing.txt

Output Set: N:\CRF3\04242001\I807223.raw

Does Not Comply
Corrected Diskette Needed

APR 19 2002

O I P E

104

3 <110> APPLICANT: Sumitomo Pharmaceutical Co., Ltd.
 5 <120> TITLE OF INVENTION: RECOMBINASE-EXPRESSING CELLS
 7 <130> FILE REFERENCE: Q63988
 9 <140> CURRENT APPLICATION NUMBER: US/09/807,223
 9 <141> CURRENT FILING DATE: 2001-04-11
 9 <150> PRIOR APPLICATION NUMBER: JP 10-289785
 10 <151> PRIOR FILING DATE: 1998-10-12
 12 <160> NUMBER OF SEQ ID NOS: 5
 14 <170> SOFTWARE: PatentIn version 3.0
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 54
 18 <212> TYPE: DNA
 C--> 19 <213> ORGANISM: Artificial *see item 11 on Env Summary Sheet*
 21 <220> FEATURE:
 22 <223> OTHER INFORMATION: FLP recognition sequence
 24 <400> SEQUENCE: 1
 25 aaattccgga gaagttccta, ttctctagaa agtataggaa cttagcgcgc attt
 28 <210> SEQ ID NO: 2
 29 <211> LENGTH: 27
 30 <212> TYPE: DNA
 C--> 31 <213> ORGANISM: Artificial
 33 <220> FEATURE:
 34 <223> OTHER INFORMATION: Polylinker
 36 <400> SEQUENCE: 2
 37 aaattgaatt cgagctcggt acccggg
 40 <210> SEQ ID NO: 3
 41 <211> LENGTH: 27
 42 <212> TYPE: DNA
 C--> 43 <213> ORGANISM: Artificial
 45 <220> FEATURE:
 46 <223> OTHER INFORMATION: Sense Strand of Adaptor
 48 <400> SEQUENCE: 3
 49 agcttctgca gcagaccgtg catcattg
 52 <210> SEQ ID NO: 4
 53 <211> LENGTH: 19
 54 <212> TYPE: DNA
 C--> 55 <213> ORGANISM: Artificial
 57 <220> FEATURE:
 58 <223> OTHER INFORMATION: Antisense Strand of Adaptor
 60 <400> SEQUENCE: 4
 61 atgcacgggc tgctgcaga
 64 <210> SEQ ID NO: 5
 65 <211> LENGTH: 1285
 66 <212> TYPE: DNA
 67 <213> ORGANISM: Homo sapiens
 69 <400> SEQUENCE: 5
 70 cagaccgtgc atcatgagcc agtttggcat cctgtgcaag acaccaccta aggtgctggt

54

27

27

19

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/807,223

DATE: 04/24/2001

TIME: 13:26:16

Input Set : A:\Q63988 Sequence Listing.txt

Output Set: N:\CRF3\04242001\I807223.raw

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76	ctttatgagc	tacaacacca	tcattagcaa	ctccctgagc	ttcgacattg	tgaacaagtc	240
78	cctccagttt	aaatacaaga	cccagaaggc	cacaatcctg	gaggcctccc	tgaagaaatt	300
80	gattcctgct	tgggagttca	ccatcatccc	ctacaatggc	cagaagcacc	agtctgatat	360
82	caatgatatt	gtgagcagtc	tgcaactcca	gttcgagtcc	tctgaggaag	ctgacaaggg	420
84	caacagccac	agcaagaaga	tgctgaaggc	cctgctcagt	gagggagaaa	gcattctggga	480
86	gatcactgag	aagatcctga	actcctttga	gtacacttcc	agattcacca	agaccaagac	540
88	cttgatccag	ttcctgttcc	tggccacctt	catcaactgt	ggcagggttca	gcgacatcaa	600
90	gaatgtggat	cccaaactct	ttaaactggt	ccagaacaag	tacctgggag	tgatcatcca	660
92	gtgcctgggt	acagagacca	agacctctgt	gagcaggcac	atctacttct	tctctgccag	720
94	gggcaggatt	gatccactgg	tgtacctgga	tgagttcctg	aggaactctg	agccagtgtc	780
96	gaagcgggtg	aacaggaccg	gcaactcttc	cagcaacaag	caggagtacc	agctgtctca	840
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100	tgccatcaag	aatggcccta	agtcccacat	tggcagacac	ctgatgacct	ccttccctgtc	960
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104	tgccgtggcc	agaacaacct	atactcacca	gatcacagca	atccctgata	actacttcgc	1080
106	actggtgtct	cggtactatg	catatgatcc	catctccaag	gagatgattg	cattgaagga	1140
108	tgagaccaac	ccaattgagg	agtggcagca	cattgagcag	ctgaagggtg	gtgccgaggg	1200
110	cagcattegc	tacctgcct	ggaatgggat	catttccag	gagggtgctg	actacctgtc	1260
112	ttcctacatc	aacagacgca	tctga				1285

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/807,223

DATE: 04/24/2001

TIME: 13:26:17

Input Set : A:\Q63988 Sequence Listing.txt

Output Set: N:\CRF3\04242001\I807223.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:19 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
L:31 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:43 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:55 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4